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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/994,990	11/09/2001 90 10/04/2002	Christopher D. Immer	KSC-12139-1	9113	
Randall M. Heald Patent Counsel National Aeronautics and Space Administration Mail Code: CC-A/John F. Kennedy Space Center Kennedy Space Center, FL 32899			EXAM	EXAMINER	
			FERGUSON, MARISSA L		
			ART UNIT	PAPER NUMBER	
			2855		
			DATE MAILED: 10/04/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

	application No.	Applicant(s)			
<i>;</i> "					
	09/994,990	IMMER ET AL.			
Offic Action Summary	xaminer	Art Unit			
	Marissa L Ferguson	2855			
The MAILING DATE of this communication appear Period for Reply	rs on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1) Responsive to communication(s) filed on					
2a)☐ This action is FINAL . 2b)⊠ This a	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.					
4a) Of the above claim(s) <u>16-18 and 22-27</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-15 and 19-21</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or el	lection requirement.				
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted					
Applicant may not request that any objection to the di	·				
11) The proposed drawing correction filed on is		oved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
14) ☐ Acknowledgment is made of a claim for domestic p	priority under 35 U.S.C. § 119(e	e) (to a provisional application).			
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal I	(PTO-413) Paper No(s) Patent Application (PTO-152)			

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DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-15 and 19-21 are drawn to a pressure transducer test apparatus, classified in class 73, subclass 708.
- II. Claims 16-18 are drawn to calibration of a transducer, classified in class600, subclass 507.
- III. Claims 22-27 are drawn to a temperature transducer, classified in class 123, subclass 169.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I,II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of Group 1, a pressure transducer apparatus has separate utility such as detecting the variable pressures in a chamber. Invention of Group II, which is method of calibrating a transducer has separate utility such as recording and checking recorded values of a transducer. Invention of Group III, which is a temperature transducer has separate utility such as measuring the temperature and comparing an enclosed gas substance. See MPEP § 806.05(d). Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Randall Heald on September 26,2002 a provisional election was made without traverse to prosecute the invention of Group 1,

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claims 1-15 and 19-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-18 and 22-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear as to what is the importance of the non-circular cross sections of the tubes. The specification does not elaborate on why the cross sections of the tubes are non-circular.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2, 11-15 and 19-21 are rejected under 35 U.S.C. 102(b) as anticipated by Schoenecke (U.S. 2,207,898).

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Regarding claims 1 and 2, Schoenecke teaches the claimed invention as follows: a pressure test apparatus comprising, a fitting (1) having an input (3) to receive a pressure input and an output (11) to receive a pressure transducer (Master Gauge A), a valve (5) attached to the fitting near the input (13), such that the fitting (13) has a variable pressure chamber (6) with first (14) and second (14a) selectable internal volumes between the valve and the output (Figure 1), and a piston (15) provided in the fitting (3), such that the movement of the piston selects the first and second volumes (Column 2, Lines 12-27).

Regarding claims 11-15 and 19-21, it is inherent that based upon the disclosed structure of the apparatus claims the method claims are rejected over the prior art.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-7 are rejected under 35 U.S.C.103(a) as being unpatentable over Schoenecke (U.S. 2,207,898) in view of Geiger (U.S. Patent 4,730,789).

Schoenecke teaches the invention claimed, except he does not explicitly disclose a piston that moves in response to an electro magnet and the valve that can be opened/closed remotely.

Geiger discloses a piston that moves in response to an electro magnet and the valve that can be opened/closed remotely (Column 17, Lines 36-68)

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Schoenecke to the piston and the electro magnet as taught by Geiger for the purpose of moving the piston a predetermined displacement.

6. Claims 8-10 are rejected under 35 U.S.C.103(a) as being unpatentable over Schoenecke (U.S. Patent U.S. 2,207,898) in view of Geiger (U.S. Patent 4,730,789) as applied to claims 1-7 above, further in view of Kluth (U.S. Patent 5,582,064).

Schoenecke, as modified, discloses the claimed device a primary tube (1) having a first and second opposite ends (3 and Figure 1), except he does explicitly disclose a secondary tube attached to the primary tube between the first and second ends, wherein the secondary tube contains the piston, and the secondary tube is attached generally perpendicular to the primary tube.

Kluth discloses a secondary tube (25) attached to the primary tube (1) between the first and second ends (Figure 6), wherein the secondary tube contains the piston (24), and the secondary tube is attached generally perpendicular to the primary tube (Figure 6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Schoenecke, as modified, to include the secondary tube attached generally perpendicular to the primary tube, as per the teachings of Kluth, for the purpose of measuring several pressures with different characteristics that are adjacent to each other.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (703) 305-3194. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin R Fuller can be reached on (703) 308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

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September 30, 2002

William Oen Primary Examiner